

Transport Statement

The Laurels, Dappers Lane, Angmering, West Sussex



Client: Andrew Carter

Ref: 7226/2.3

Date: May 2018

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Issue	Issue date	Compiled	Checked	Authorised
DRAFT	23 rd April 2018	RS	RW	LNS
1 st	8 th May 2018	RS	RW	LNS

Compiled by: Rachel Stevenson
Checked by: Richard Wells BSc, MCIHT
Authorised by: Lawrence Stringer CEng, MCIHT, MRTPI

Executive Summary

This Transport Statement has been written for the proposed development of 9 new dwellings on the land situated to the rear of the Laurels property on the east side of Dappers Lane, Angmering, West Sussex. This report forms part of the outline planning application for the erection of 9 additional dwellings.

The development site is brownfield land to the rear of an existing residential dwelling. There are residential properties and local business occupying the land to the north and south of the site, and fields to the east. There are many residential properties along the western side of Dappers Lane. The total site area is approximately 0.58 hectares.

The proposed development of 9 dwellings consists of 2No x 2-bedroom dwellings, 3No x 3-bedroom dwellings and 4No x 4-bedroom dwellings, a turning head and landscaping. The development will include on-site car and cycle parking in line with WSCC requirements.

The site access will be laid out in accordance with West Sussex County Council's standards with a turning head to allow service and emergency vehicles to turn on site and exit in a forward-facing manner. The access road has a width of approximately 4.5 metres. The access will be designed with adequate visibility in both directions meeting Manual for Streets standards.

The proposed development site is situated in a sustainable location which is close to many local amenities and bus stops providing access to transport and other essential facilities.

The proposed development is likely to generate around 4 vehicle trips in both the AM and PM peak hours, and about 34 over the course of a 12hour typical weekday (0700-1900). These small increases can be readily accommodated on the highway network with no material operational impacts.

There are no unacceptable highway or transport impacts as a result of the proposed development.

1 Introduction

- 1.1 This report has been prepared by GTA Civils Ltd for Andrew Carter in conjunction with the above development and no responsibility is accepted to any third party for all or part of this study in connection with this or any other development.
- 1.2 GTA Civils Ltd has been commissioned by Andrew Carter to prepare a Transport Report in connection with the proposed erection of 9 additional dwellings consisting of 2No x 2-bedroom dwellings, 3No x 3-bedroom dwellings and 4No x 4-bedroom dwellings on the land to the rear of The Laurels property situated on the east side of Dappers Lane, Angmering, West Sussex.

The Report

- 1.3 This Transport Statement has been written to include the following scope of work:
- ✦ Review local planning and transport policies and their relevance to transport issues for this site;
 - ✦ Review site accessibility by all transport modes (public transport, walking, cycling);
 - ✦ Detailed assessment of local transport issues and their relevance to the site;
 - ✦ Estimate broad estimates of person and trip generations for the proposed development and distribute the generated traffic on the local network;
 - ✦ Consider any information regarding the existing use of the site;
 - ✦ Review impact of the traffic generated from the development on the local network;
 - ✦ Review proposed car and cycle parking provision in light of the estimated site trip generations and local standards;
 - ✦ Review servicing requirements of the site and provide swept path analysis for refuse collection vehicles;
 - ✦ Outline general approach and typical measures to be adopted during the construction phase.

Policy Context

- 1.4 This report has been written in accordance with the following frameworks:
- ✦ National Planning Policy Framework;
 - ✦ 2014 National Planning Policy Guidance;
 - ✦ West Sussex County Council's Local Transport Plan 2011-2026 (LTP3);
 - ✦ West Sussex County Council's Transport Assessment Guidance;
 - ✦ Arun District Council's Local Plan 2011-2031.

2 Site Location

- 2.1 The site is located within a residential area on the east side of Dappers Lane which is a narrow road restricted to a 30mph speed limit.
- 2.2 The site is situated on the far north-eastern edge of Angmering Village. Angmering is a large, narrow village and civil parish between Littlehampton and Worthing. The village lies within the area served by Arun District Council. An aerial view of the site location is illustrated below in **Figure 2.1** with the red line site boundary also shown.

Figure 2.1 Aerial view of site



- 2.3 A larger site location plan is included in **Appendix A**.

3 Existing Site

- 3.1 The development site is brownfield land to the rear of an existing residential dwelling. There are residential properties and local business occupying the land to the north and south of the site, and fields to the east. There are many residential properties along the western side of Dappers Lane.
- 3.2 The total site area is approximately 0.58 hectares.
- 3.3 The site currently has an existing gated access onto Dappers Lane measuring around 4 metres in width.
- 3.4 The residential dwelling currently on site will be retained as existing, with all access to the existing dwelling also being retained as existing.

Accident Data

- 3.5 Crash map records have been examined for Dappers Lane (including its junction with Arundel Road/Swillage Lane to the north and its junction with Water Lane to the south) for the 3 year period of 2015-2017. During this time there were no incidents recorded along this 1km stretch of road in the vicinity of the access.
- 3.6 Therefore there are no incidents relating to the site access location on Dappers Lane.
- 3.7 The closest incidents occurred south of the site on Water Lane, west of the junction with Dappers Lane. These incidents are not considered to be impacted/affected by the proposed development in terms of road safety.

4 Proposed Development

General

4.1 The proposed development consists of 9 No new units. The development mix is proposed as follows:

• 2 bedroom dwellings	x 2
• 3 bedroom dwellings	x 3
• 4 bedroom dwellings	x 4
• Total	9 units

Proposed Access

4.2 Access to the site will continue to be from Dappers Lane at the existing location as shown within the layout plans in **Appendix B**.

4.3 The proposed access will be laid out in accordance with West Sussex County Council's standards as a shared surface with a bell mouth access.

4.4 Manual for Streets 1 is the appropriate guidance document for determining visibility splay requirements for this type of road. Visibility splays are made up of the X distance (distance back into the new access from the edge of carriageway of the main) and the Y distance (the distance along the main road in each direction).

4.5 A distance of 2.4 metres is the appropriate X distance for most roads including this site. The Y distance is determined based on the 30mph speed limit. Therefore, the required Y distance in each direction, using Table 7.1 of MfS, is 43 metres.

4.6 Taking the MfS1 requirement based on the 30mph speed limit, visibility splays of 2.4 metres x 43 metres are achievable in each direction, due to the straight alignment of Dappers Lane. This may require some minor trimming back of the existing hedge along the site frontage. Therefore, an access to the main development area laid out to appropriate standards with adequate visibility is achievable.

4.7 The absolute minimum X distance of 2m is acceptable where roads are lightly trafficked. Due to the quiet nature of Dappers Lane, visibility splays of 2m x 43m should be considered appropriate for the single access to one type B dwelling. The existing hedges and undergrowth in this area may also need to be cut back to ensure these visibility splays are achievable.

Proposed Parking

- 4.8 On-site parking provisions will be laid out in accordance with West Sussex County Council's 'Guidance for Car Parking in New Residential Developments' and the WSCC car parking demand calculator. The calculation tool will give the appropriate level of parking provision with regards to the ward and district within West Sussex, the number of bedrooms and habitable rooms per unit etc. and should be used as a guide. See **Table 4.1** below.

Table 4.1 – WSCC Car Parking Demand Calculator Results

DEVELOPMENT MIX				ALLOCATED	PARKING DEMAND				TOTAL PARKING DEMAND
Unit Type	Unit Tenure	Habitable Rooms	No. of Units	Spaces (per unit)	Unallocated for Residents		Unallocated for Visitors		
					Per Unit	Total	Per Unit	Total	
Houses	Private	4	2	0	1	3	0	0	3
Houses	Private	5	3	2	0	0	0	1	7
Houses	Private	6	4	2	0	1	0	1	9
Total			9	14		3.64		1.80	19

- 4.9 The results from the WSCC car parking demand calculator suggest that there will be a total demand for a provision of 19 car parking spaces as part of the development on the basis of all 3 and 4 bedroom dwellings having 2 allocated spaces each, and all 2 bedroom dwellings having a communal unallocated parking area. The layout plan shown in **Appendix B** demonstrates a provision of 22 independently accessible spaces which meets the above requirement with additional visitor parking. There are 8 additional spaces on site which are not independently accessible.
- 4.10 Therefore, the proposed parking provision is considered adequate as it exceeds the minimum car parking demand as identified using the WSCC car parking demand calculator. Each of the 4 bedroom dwellings also have a single garage provided which could also be used for car parking.
- 4.11 Covered and secure cycle parking to meet the West Sussex County Council's standards will be provided for each unit. The WSCC 'Guidance on Parking in New Residential Development' document states the following cycle parking requirement per unit:

- ❖ **1No & 2No bedroom houses** 1 space (per unit)
- ❖ **3No+ bedroom houses** 2 spaces (per unit)

- 4.12 These will be provided within sheds in the garden area of each dwelling.

Emergency Access and Service Vehicles

- 4.13 The proposed access drive will be laid out so that emergency and refuse vehicles can enter and turn on site. A bin store will be provided in the front garden area of each dwelling. The location of the bin stores is designed in accordance with Manual for Streets (MfS) standards which states within paragraph 6.8.9 that *'residents should not be required to carry waste more than 30m to the storage point' and 'waste collection vehicles should be able to get within 25m of the storage point and the gradient between the two should not exceed 1:12'*.
- 4.14 A swept path analysis for an 11.2metre long vehicle has been undertaken and is included in **Appendix C**.
- 4.15 The proposed dwellings can be accessed within 45m requiring Emergency Vehicles to enter the site. This is in line with the requirements set out for emergency vehicles in paragraph 6.7.2 of Manual for Streets.

Stage 1 Road Safety Audit (RSA1)

- 4.16 A Stage 1 Road Safety Audit was undertaken by EC Road Safety Limited on Monday 30th April 2018 and the site was examined in daylight hours on Wednesday 2nd May 2018 and will be included within **Appendix D** of this report. The purpose of the RSA1 is to assess the suitability of the proposed access onto the B2028 West Park Road.
- 4.17 The Road Safety Audit was carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme. The problem identified has been noted in the Designer's Response report included in **Appendix E** which can be overcome by ensuring verge clearance to achieve adequate visibility splays.
- 4.18 One minor point was raised within the RSA1. Overall, the problem highlighted has been addressed within this Transport Statement as detailed in the Designer's Response.

5 Site Accessibility

Highway Network

- 5.1 Dappers Lane is a narrow road, with a carriageway width of around 5m, subject to a 30mph speed limit. To the north this road runs to the one-way bridge beneath the A27. This effectively means that Dappers Lane is a cul-de-sac southbound as cars are not able to drive from the old Arundel Road into Dappers Lane. It is only possible for buses to make the trip. To the south the road links to Water Lane which runs through the centre of Angmering.
- 5.2 Although there are no footways along Dappers Lane, there are relatively wide grass verges on both sides of the road. There is a footway provided along the northern side of Water Lane which provides a pedestrian link through to Angmering High Street where there are many local amenities. The site lies opposite the Dappers Lane junction with Merryfield Crescent, there is a footway provided on the south side of Merryfield Crescent which provides a safe and convenient walking route for future residents.
- 5.3 A previous planning application at Merry England Nursery, north of the site on Dappers Lane, BN16 4EN, A/142/16/OUT was granted permission by Arun District Council to construct a public footway leading southwards from the Merry England Nursery site entrance, linking to Merryfield Crescent (See paragraphs 8.2 and 8.3).
- 5.4 Water Lane / Station Road continues south-west of the site, and joins the A259 and B2140 at a roundabout. The A259 runs from east to west providing a road link from Havant to Folkestone and forms part of the strategic highway network. The B2140 starts at a roundabout with the A259 and A280 to the southeast of Angmering and zigzags westwards through East Preston and Rustington and ends in Littlehampton, this forming part of the local highway network.

Bus

- 5.5 The nearest bus stops with frequent services are located around 55m southwest of the existing access to the site, on Merryfield Crescent off of Dappers Lane; this representing a short walk of around 1-2 minutes. This stop is served by service number 9; this service provides relatively frequent connections to Littlehampton, Angmering Station, Rustington High Street, Shoreham-by-Sea, Lancing, Worthing etc. This service runs at a frequency of 1 service per hour from Monday to Saturday, this service is not available on Sundays.
- 5.6 The bus services currently available provide relatively good access for the residents of the proposed development to gain access to local facilities and towns such as Angmering Railway Station, Worthing and Rustington.

Rail

- 5.7 The nearest local railway station with frequent services is Angmering, which is located around 2.1km from the site. This is considered too far to walk for commuting purposes but is around 6-7 minutes away by bicycle. There are cycle parking facilities at the station open 24 hours, giving the option for residents to cycle to the station.
- 5.8 Bus service 9 also serves Angmering Railway Station providing an alternative mode of transport between the site and the station. This total journey would take around 11 minutes.
- 5.9 Services from this station are run by Southern and are on the West Coastway Line. This station provides frequent services to destinations such as London Victoria, Brighton, Southampton Central, Haywards Heath, Portsmouth Harbour and Littlehampton. The journey times and service frequencies are set out below in **Table 5.1**.

Table 5.1 – Local rail services

Destination	Frequency	Journey time
London Victoria	2-3 per hour	1h 35m
Southampton Central	1-2 per hour	1h 13m
Portsmouth Harbour	1-2 per hour	50m
Haywards Heath	2-3 per hour	43m
Brighton	2-3 per hour	30m
Littlehampton	1-2 per hour	10m

Walking and Cycling

- 5.10 Locally, the topography of the ground is fairly level which is conducive to walking and cycling. A number of the local roads within Angmering are lightly trafficked and therefore, are suitable for walking and cycling.
- 5.11 The Institution of Highway and Transportation (IHT) publication 'Guidelines for Providing Journeys on Foot, 2000') contains a table (*Table 2.1*) of suggested walking distances for different purposes. **Table 5.2** recreates this table:

Table 5.2 – Extract from IHT 'Guidelines for Providing for Journeys on Foot'

Purpose/Category	Town Centre	Commuting	School/Shopping
<i>Acceptable</i>	200	500	400
<i>Desirable</i>	400	1000	800
<i>Maximum</i>	800	2000	1200

- 5.12 Within the vicinity of the site there are local facilities and essential services that will be easily accessible for future residents of the new development. In the local area the residents of the proposed development will be able to easily access entertainment, education, employment and transport. There are convenience stores and schools all within walking distance of the site. Key destinations in the local area are listed below in **Table 5.3-5.6**.

Table 5.3 – Accessibility of Development Site to Local Schools

Destination	Distance from site (metres)	Time taken to walk (minutes)	Within CIHT Guidelines (YES/NO)
St Margarets Church of England Primary School	900	10 minutes	YES
St Wilfreds Catholic Primary School	840	10 minutes	YES
Angmering School and Sixth Form	2000	25 minutes	NO
William Older Playgroup	840	10 minutes	YES

Table 5.4 – Accessibility of Development Site to Shops

Destination	Distance from site (metres)	Time taken to walk (minutes)	Within CIHT Guidelines (YES/NO)
High Street Shops	800	9 minutes	YES
Bank / Post Office	832	10 minutes	YES
Supermarket (Co-operative)	833	10 minutes	YES

Table 5.5 – Accessibility of Development Site to Local Surgeries

Destination	Distance from site (metres)	Time taken to walk (minutes)	Within CIHT Guidelines (YES/NO)
Doctors Surgery	965	11 minutes	YES
Pharmacy (Lloyds)	966	12 minutes	YES
Dental Practice	644	8 minutes	YES

Table 5.6 – Accessibility of Development Site to Community Facilities

Destination	Distance from site (metres)	Time taken to walk (minutes)	Within CIHT Guidelines (YES/NO)
St Margarets Church of England	967	11 minutes	YES
Angmering Library	966	11 minutes	YES
Angmering Community Centre	1500	19 minutes	NO

- 5.13 As seen from **Tables 5.3-5.6** above, there are many local amenities within maximum CIHT walking distance from the site. Residents are unlikely to require their private cars to make such short journeys and so this will encourage walking/cycling and the use of sustainable public transport.

6 Trip Generations and Mode Choice

Trip Rates

- 6.1 Trip generations for the site proposals are derived from interrogation of the TRICS database. The trip rates have been established using a sample of surveyed sites which, from the examples available, best described the characteristics of sites in the Angmering area. Trip rates were based on suburban and edge-of-town private housing examples, and are therefore robust.
- 6.2 The TRICS search has been restricted to reflect the location of the proposed site. See **Table 6.1** below.

Table 6.1 – Likely trip rates for the proposed development of 9 dwellings

Proposed Use	Time Period	Trip Rate (per 1 dwelling)	Trip Rate (proposed for 9 dwellings)
'Privately Owned Houses'	Total AM Peak Hour (0800-0900)	0.392	3.528
	Total PM Peak Hour (1700-1800)	0.391	3.519

- 6.3 The detailed TRICS data for the proposed development is included in **Appendix F**.
- 6.4 Using the information from the TRICS database, the proposed development would be likely to lead to:
- ✦ Around 4 additional two-way trips in the AM peak hour;
 - ✦ Around 4 additional two-way trips in the PM peak hour;
 - ✦ Overall, around 34 additional two-way trips over a 12 hour day.
- 6.5 The result of the TRICS data shows a minor increase to the traffic generation associated with the proposed development. It is unlikely that the resultant traffic flows would have a material impact on the operation and safety of the local highway network.

7 Highway Network Assessments

Scope

- 7.1 The assessment of transport impacts has been carried out on the basis that all the trips generated by the proposed development are new, i.e. no existing trips from any existing use have been taken into account.
- 7.2 The ability of the local highway network to satisfactorily accommodate new traffic generations to/from the proposed development has been assessed in terms of impact on the local highway network.

Base Year Traffic Flows

- 7.3 There is no universally agreed approach to determining the capacity of an urban road, but one indication is given by TA79/99 in The Design Manual for Roads and Bridges (DMRB). This type of road is classified in DMRB in Table 1 as a UAP3 road.
- 7.4 Using the Table 2 of the TA79/99 DMRB document it would suggest that the traffic capacity of roads of this type are likely to be around 545 vehicles per hour one-way. This is the busiest direction flow (assuming a 60/40 directional split), therefore, the capacity of this type of road is likely to be around 900 vehicles per hour two-way.
- 7.5 Actual traffic flows along this section of Dappers Lane are very low as it is effectively a cul-de-sac southbound (traffic is unable to enter from north of the A27). Peak hour 2 way vehicle flows will be less than 100. Taking into account the theoretical capacity of the road, there is a significant amount of existing spare capacity.

Summary

- 7.6 The local highway network can readily accommodate the small level of additional traffic arising from the proposed development with no material operational impacts.

8 Impact Assessments

General

- 8.1 The assessment of transport impacts has been carried out on the basis that all the trips generated by the proposed development are new, i.e. no existing trips in relation to any existing use have been taken into account.

Pedestrian Network

- 8.2 There is currently no public footway along Dappers Lane, only grass verges either side. However, a previous planning application at Merry England Nursery, north of the site on Dappers Lane, BN16 4EN, A/142/16/OUT was granted permission by Arun District Council to construct a public footway.
- 8.3 The new footway will run from the A/142/16/OUT site to Merryfield Crescent, providing safer pedestrian access to many local amenities and encourage walking and cycling between the proposed development and facilities in the centre of Angmering Village.

Highway Network

- 8.4 The ability of the local highway network to accommodate existing and future flows has been assessed. The local highway network can accommodate the additional traffic arising from the proposed development with no material operational impacts. The small amount of new traffic generated by the site would have no material impact on the local highway network.
- 8.5 As part of the provisions at the Dappers Lane/proposed access junction, a suitable pedestrian crossing point would be provided for walking trips between the site and Merryfield Crescent in the form of a dropped kerb and tactile paving.

Parking

- 8.6 The proposed on-site vehicle parking will be designed in accordance with the West Sussex County Council Parking Demand Calculator to ensure an appropriate number of vehicle parking spaces are provided.
- 8.7 Therefore, a total of 19 parking spaces are required, however a total of 22 parking spaces will be provided on site for residents and visitors. Each of the 3 and 4-bedroom dwellings will have 2 allocated spaces per unit, this equates to a total of 14 allocated spaces, the 2-bedroom dwellings will have an unallocated parking area with 4 spaces provided, and an additional 4 spaces will be provided on site for use by visitors.
- 8.8 Cycle parking will also be provided in line with West Sussex County Council standards.

9 Conclusion

- 9.1 This Transport Statement forms part of the outline planning application for the proposed erection of 9 additional dwellings consisting of 2No x 2-bedroom dwellings, 3No x 3-bedroom dwellings and 4No x 4-bedroom dwellings.
- 9.2 The total on-site car parking provision has been designed in accordance with the WSCC car parking demand calculator which suggested a minimum provision of 19 spaces. It is proposed that a total of 22 individually accessible parking spaces will be provided on site for residents and visitors. There will also be 8 additional spaces provided on site which are not individually accessible.
- 9.3 The proposed access will be laid out in accordance with WSCC's standards and will be shared space for most of its length, with a 1.4m wide footway provided on the north side of the access road. Dropped kerbs and tactile paving will be provided. The access will be designed with adequate visibility in both directions meeting MfS and DMRB standards. The required visibility splays have been based on the 30mph speed limit.
- 9.4 Manual for Streets (MfS) is considered the appropriate guide for determining visibility splay requirements and therefore 2.4m x 43m splays are required. These splays have been measured and appear to be achievable. The single access also adheres to MfS minimum requirements achieving visibility splays of 2.4m x 43m.
- 9.5 The proposed development site is located in a relatively accessible area which is close to many local amenities and bus stops providing access to transport and other essential facilities.
- 9.6 The proposed development is likely to generate around 4 additional vehicle trips in both the AM and PM peak hours, and about 34 over the course of a 12hour weekday (0700-1900). These can be accommodated on the highway network with no material operational impacts and no material impact on the local highway network.
- 9.7 A Stage 1 RSA was undertaken to identify any features of the development that could be removed or modified in order to improve the safety of the scheme. The RSA1 highlighted 1 problem which can be easily addressed at the detailed design stage as outlined within the designer's response.
- 9.8 Overall, there are no unacceptable highway or transport impacts as a result of the proposed development.

- End of Report -

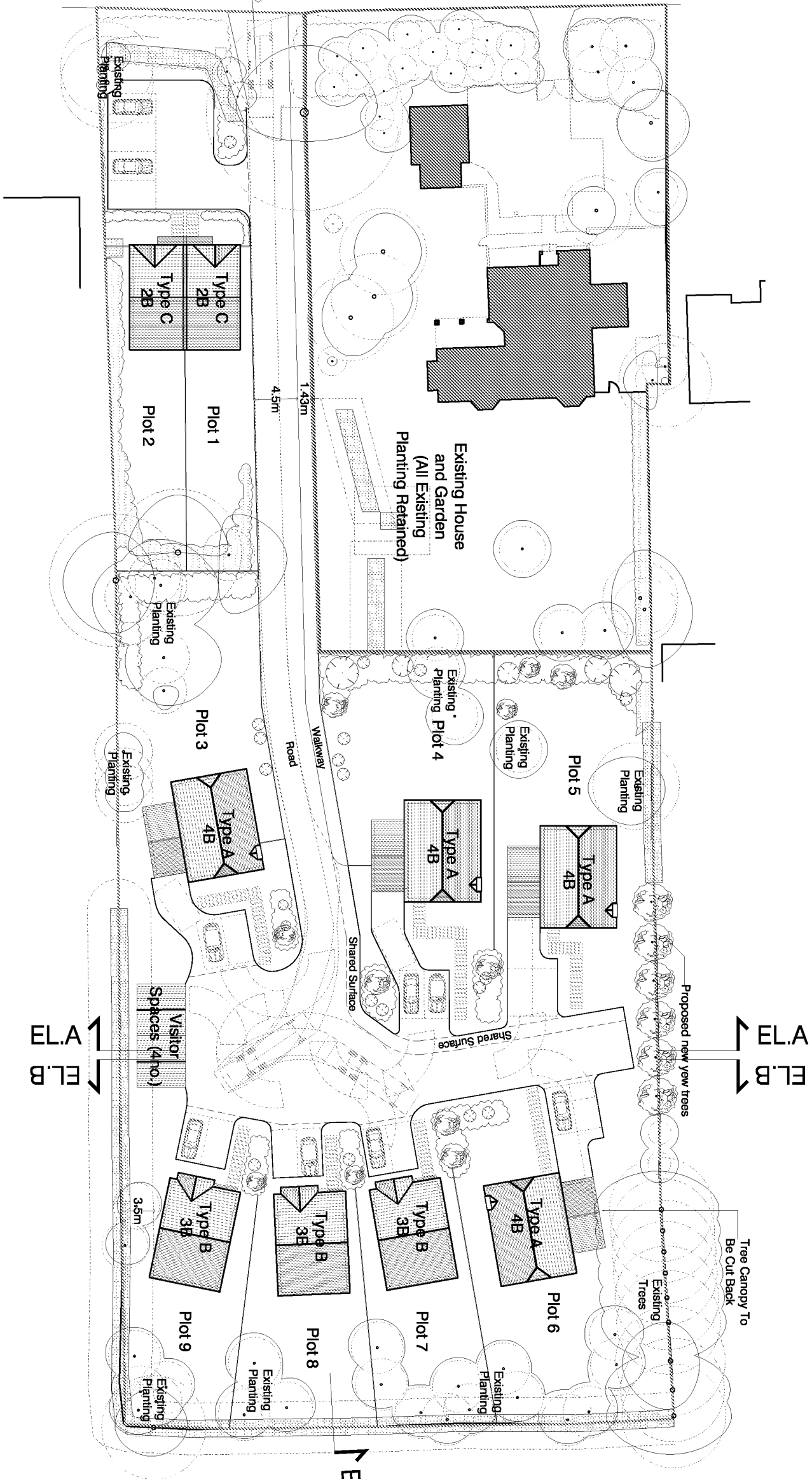
Appendix A

Site Location Map



Appendix B

Site Layout Plans



Type A - 4B/6P - 118.6 sqm GIA
Type B - 3B/5P - 112.4 sqm GIA
Type C - 2B/4P - 90.4 sqm GIA

Plot 1,2 Type C at 90.4 sqm Each

90.4 x 2no. = 180.8 sqm GIA

Plot 7,8,9 Type B at 112.4 sqm Each

112.4 x 3no. = 337.2 sqm GIA

Plot 3,4,5,6 Type A at 118.6 sqm GIA

118.6 x 4no. = 474.4 sqm GIA

Total Development (9 Units) - 992.4sqm GIA

Total Area Site - 0.5884 Hectares

Parking Schedule

Type A - 3 Spaces on Drive, 1 Space in Car Port

Type A Total Spaces - 16 Spaces

Type B - 2 Spaces on Drive

Type B Total Spaces - 6 Spaces

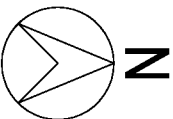
Type C - 2 Spaces on Drive

Type C Total Spaces - 4 Spaces

Total Visitor Spaces 4

Total Development Spaces - 30 Spaces

1:500 @ A3 SCALE



1

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE MAKING SHOP DRAWINGS OR COMMENCING WORK OF ANY KIND. NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

1. THE BOUNDARIES SHOWN ARE BASED ON INFORMATION BY OTHERS. ALL BOUNDARIES TO BE VERIFIED ON SITE PRIOR TO COMMENCING CONSTRUCTION.

2. TOPOGRAPHICAL LEVELS TO BE CONFIRMED.

3. DESIGN & QUOTED AREAS ARE SUBJECT TO DESIGN DEVELOPMENT & STATUTORY CONSENTS

4. ALL SURVEY INFORMATION SHOWN IS SUBJECT TO FURTHER SITE INVESTIGATION DURING DEMOLITION.

1/500 @ 43

DATE: 13/04/2018

DATE: 18/04/2018

DATE: 18/04/2018

PROJECT:

New Dwellings At The Laurels

Wardner & Lane, Singapore

CLIENT:

DRAWING TITLE :

Master Plan For 2 Units

NUMBER:

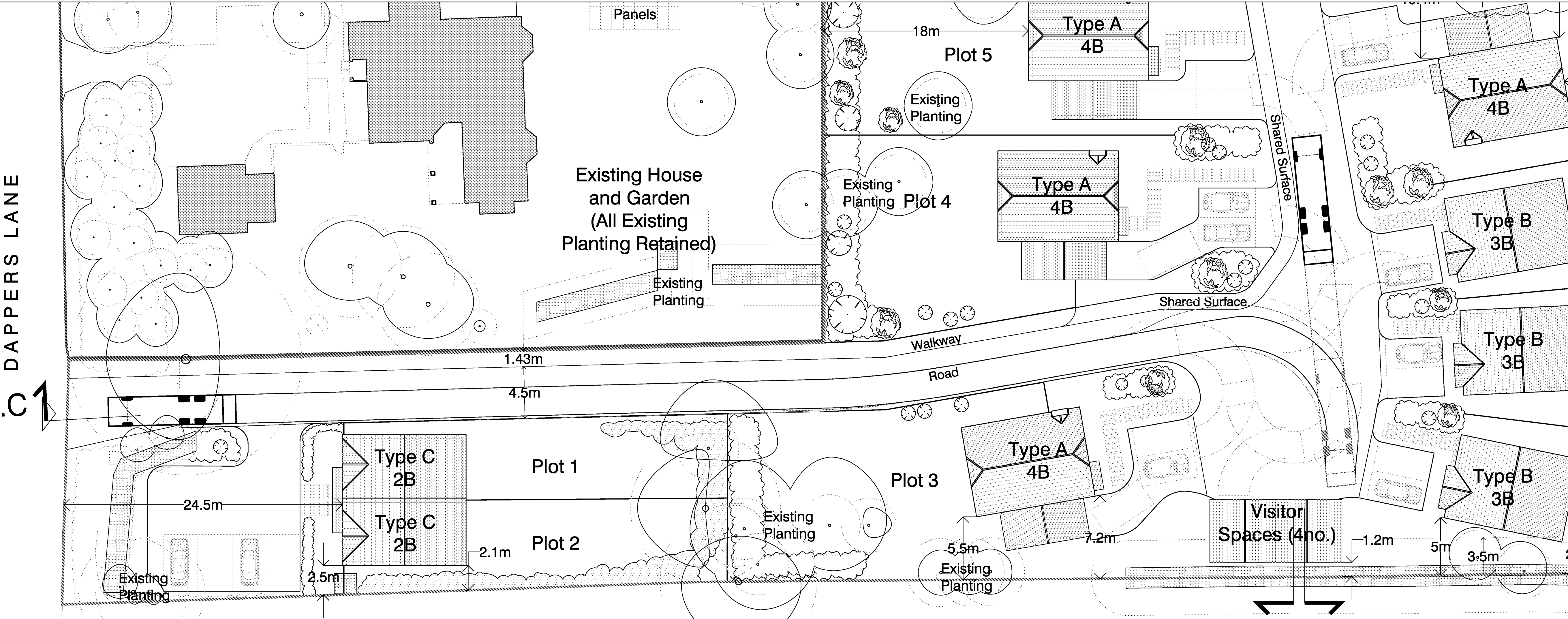
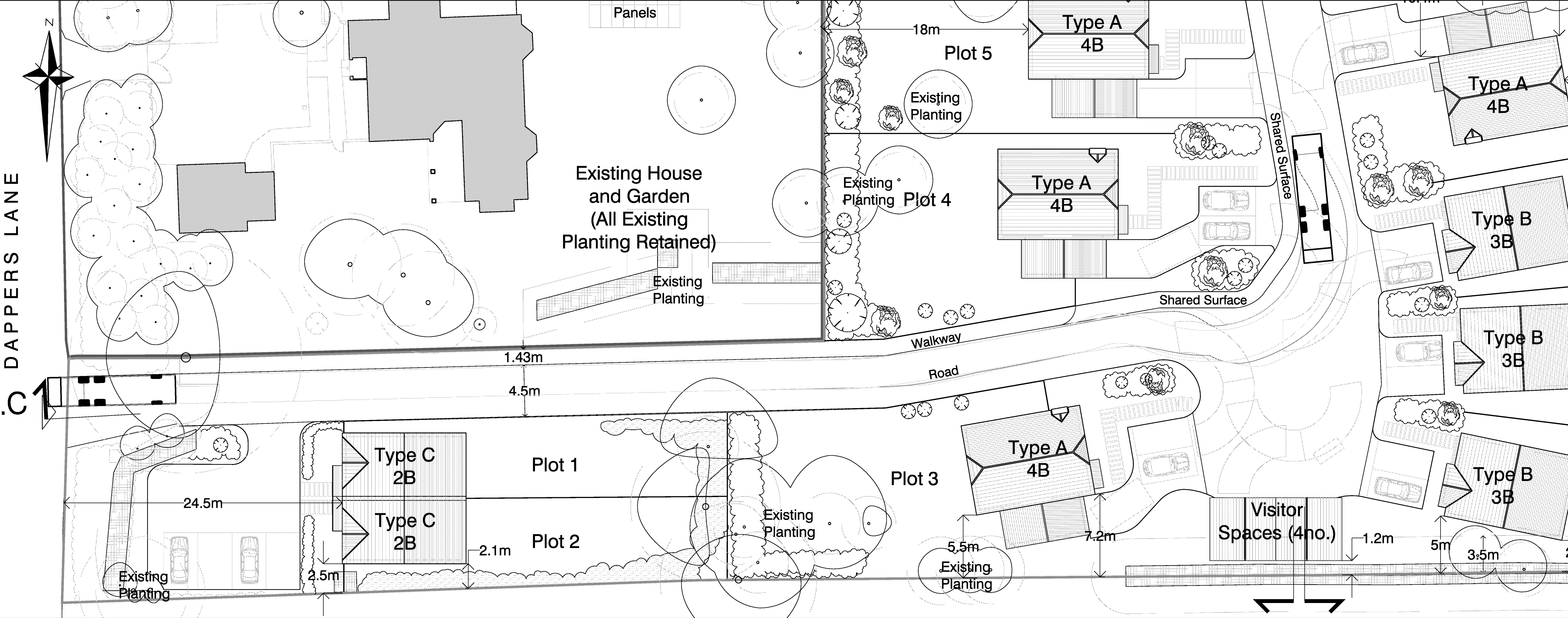
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REVISION

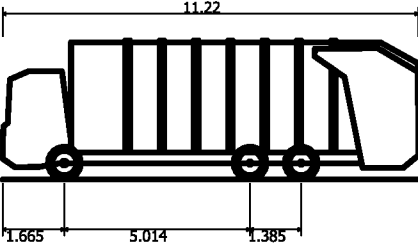
8

Appendix C

Swept Path Analysis



- GENERAL NOTES
1. The location, size, depth and identification of existing services that may be shown or referred to on this drawing have been assessed from non intrusive observations, record drawings or the like. The contractor shall safely carry out intrusive investigations, trial holes or soundings prior to commencing work to satisfy himself that it is safe to proceed and that the assessments are accurate. any discrepancies shall be notified to gta prior to works commencing.
 2. Tender or billing drawings shall not be used for construction or the ordering of materials.
 3. Do not scale. All dimensions and levels to be site confirmed.
 4. This drawing shall be read in conjunction with all relevant architects, consultants drawings and specifications, together with H&S plan requirements
 5. Copyright : This drawing must not be copied, amended nor reproduced without the prior written agreement of gta.
 6. All drawings specifications and recommendations made by gta are subject to Local Authority and other relevant Statutory Authorities approval. Any works or services made abortive due to the client proceeding prior to these approvals is considered wholly at the Clients risk. gta hold no responsibility for resulting abortive works or costs.



Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)
Overall Length 11.220m
Overall Width 2.530m
Overall Body Height 3.756m
Min Body Ground Clearance 0.309m
Track Width 2.530m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 11.550m



- Vehicle wheels outline
- Vehicle Body envelope

C	UPDATED LAYOUT	08.05.2018	ART	LS
C	DIFFERENT REFUSE VEHICLE MANEUVER	19.04.2018	ART	LS
B	DIFFERENT REFUSE VEHICLE MANEUVER	18.04.2018	ART	LS
A	UPDATED LAYOUT	17.04.2018	ART	LS
-	INITIAL ISSUE	16.04.2018	ART	LS
Rev	Amendments	Date	Dsn	Chk
Status PRELIMINARY				
Client ECE ARCHITECTS				
Architect				
Project DAPPER'S LANE ANGMERING				
Title ANTICIPATED SWEEPED PATH OF AN 11.22m REFUSE VEHICLE				
Date	APRIL 2018	Scale @ A1	1:200	
Clients Ref		Project Ref	7226	
gtaCivils Consulting Engineers Gloucester House, 66a Church Walk, Burgess Hill, West Sussex, RH15 9AS Tel:01444 871444 Fax:01444 871401 Web: www.gtacivils.co.uk				
Drawing Number	7226-101	Rev.	D	

Appendix D

Stage 1 Road Safety Audit

**The Laurels
Dappers Lane
Angmering**

Proposed Site Access

STAGE 1 ROAD SAFETY AUDIT

Report No. EC/2018/05/GTA1

May 2018



Prepared by:

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AUTHORISATION SHEET

Client: GTA Civils Limited

Project Sponsor: Richard Wells

Project: Proposed Site Access

Address: The Laurels
Dappers Lane
Angmering

PREPARED BY

Name: Paul Nevard

Position: Principal Engineer

Date: 02 May 2018

AGREED BY

Name: Vinny Rey

Position: Principal Engineer

Date: 03 May 2018

AUTHORISED FOR ISSUE

Name: Paul Nevard

Position: Principal Engineer

Date: 03 May 2018

DISTRIBUTION

Issue No.	Issued To	Date Issued
1.	Richard Wells– GTA Civils Limited	03/05/2018
2.	Office Copy	03/05/2018

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1. INTRODUCTION

1.1 General

1.1.1 EC Road Safety Limited has been commissioned by GTA Civils Limited to undertake a Stage 1 Road Safety Audit on the proposed site access onto Dappers Lane, Angmering. The development site is Greenfield land to the rear of an existing residential dwelling. There are residential properties and local business occupying the land to the north and south of the site. There are many residential properties along the western side of Dappers Lane. There is an existing site access onto Dappers Lane (gated) that measures approximately 4 metres in width. This existing access would be amended to serve the proposed scheme. The existing dwelling on the site would be retained as part of the proposal.

1.1.2 The scope of the audit relates to the proposed amendments to the site access onto Dappers Lane, Angmering.

1.1.3 The existing access to be amended adjoins Dappers Lane, which is a single carriageway road with a width of around 5 metres, subject to the 30mph speed limit. However, a change of speed limit is located further along Dappers Lane to the north to 60mph. The road itself is rural in its nature with residential properties located along the route. No Street lighting is present in close proximity to the site and limited footways exist along Dappers Lane with large grass verges intersecting the property boundaries.

1.1.4 The Road Safety Audit Team (approved by GTA Civils Limited) consisted of:

Paul Nevard
MSc, BA (Hons) CMILT, MCIHT, MSoRSA
RSA, Cert. Comp

Director – EC Road Safety Ltd
Principal Traffic Engineer
Road Safety Audit Team Leader

Vinny Rey
BA (Hons) MCIHT, MSoRSA
RSA, Cert. Comp

Principal Traffic Engineer
Road Safety Audit Team Member

1.1.5 The Road Safety Audit Brief was issued by the Project Sponsor to the Audit Team which consisted of the following:

- Transport Report - The Laurels, Dappers Lane - DRAFT.PDF

1.1.6 The Audit Team examined the Audit Brief and plans at the EC Road Safety office on Monday 30th April 2018 and the site was subsequently examined by Paul Nevard and Vinny Rey together on Wednesday 2nd May 2018. The weather during the daytime site visit was overcast with some rain showers. The carriageway was wet during the time of the site visit. Traffic flows were low and vehicle speeds were also observed as being low.

1.1.7 The Road Safety Audit also comprised of an examination of the documents forming the Audit Brief supplied to the Road Safety Audit Team and are referenced in Appendix A of this report. The location of any problems raised can be found within the report, photographed for reference or referenced in Appendix B of this report. If no problems are identified, only a location plan will be provided for reference in Appendix B.

1.1.8 The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges (DMRB) Standard HD19/15. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented

and has not examined or verified the compliance of the designs to any other criteria. This Road Safety Audit has not considered structural safety or checked for compliance to standards. This safety audit does not perform any “Technical Check” function on these proposals. It is assumed that the Project Sponsor is satisfied that such a “Technical Check” has been successfully completed prior to requesting this safety audit.

1.1.9 At this preliminary stage of the design there are no details available of surface water drainage (with associated gullies), street lighting design (or assessments) or landscaping. These issues will need detailing and to be checked during any subsequent Stage 2 Road Safety Audit.

1.1.10 This Road Safety Audit has been undertaken based on the Road Safety Audit Team's previous experience and knowledge in undertaking Accident Investigation, Road Safety Engineering and Road Safety Audits. No member of the Road Safety Audit Team has had any previous input to the design of the scheme. The audit has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme. The problems identified have been noted in this report together with suggestions for safety improvements, which we recommend should be studied for implementation.

1.2 Purpose of Scheme

1.2.1 The purpose of the scheme is to provide an amended access onto Dappers Lane to serve the development site.

2. PROBLEMS IDENTIFIED IN PREVIOUS ROAD SAFETY AUDITS

No previous audits have been supplied to the Audit Team for this site and the Audit Team believes that none have been produced.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1 General

No Problems identified in this category at this Stage.

3.2

Local Alignment

No Problems identified in this category at this Stage.

3.3 Junctions

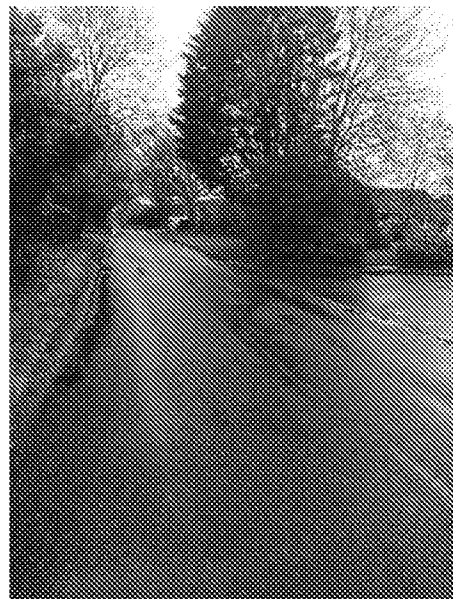
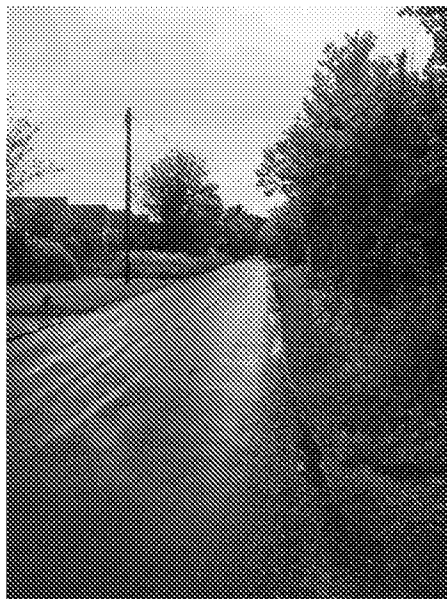
3.3.1 PROBLEM

Location: Visibility and sightlines from the proposed access

Summary: Restricted visibility and sightlines could result in side swipe collisions.

Detail: It is proposed to amend the existing access on to the public highway for the proposed development site. The plan does not show the visibility splays on the plan but the Transport Assessment provided confirms that some vegetation will be trimmed and cut back to provide visibility in both directions.

There are existing trees and foliage at the location which could currently restrict visibility. Without sufficient visibility splays in either direction being provided there is a danger that vehicles travelling along Dappers Lane may not have sufficient stopping distance should they come in to conflict with a vehicle emerging from the site. Equally, vehicles emerging from the site may not have sufficient visibility splays in order that they may enter the public highway safely. This could lead to vehicles colliding with each other.



RECOMMENDATION

Provide visibility splays to enable emerging drivers using the access point adequate visibility to see oncoming traffic in sufficient time to make their manoeuvre safely. This may be achieved by reducing and cutting back the trees and planting on the site boundary.

3.4 Non-Motorised User Provision

No Problems identified in this category at this Stage.

3.5 Road Signs, Carriageway Markings & Street Lighting

No Problems identified in this category at this Stage.

End of list of Problems identified and Recommendations offered in this Stage 1 Audit

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with HD 19/15.

AUDIT TEAM LEADER

Paul Nevard

Signed:



EC Road Safety Ltd
1 Draven Close
Hayes
Bromley
Kent
BR2 7PN
United Kingdom

Date: 03/05/2018

AUDIT TEAM MEMBER

Vinny Rey

Signed:



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Date: 03/05/2018

Tel: 07508 76 76 96

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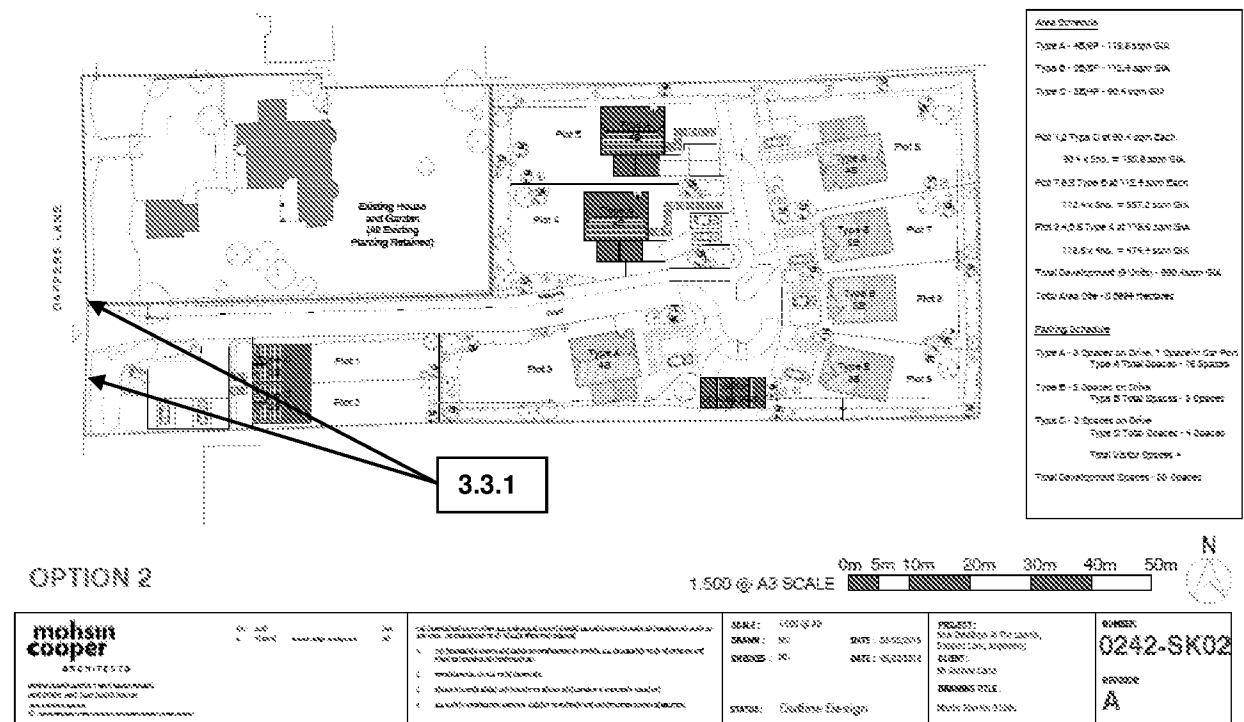
APPENDIX A

List of documents and plans considered during this Stage 1 Road Safety Audit:

- Transport Report - The Laurels, Dappers Lane - DRAFT.PDF

APPENDIX B

Location of problems identified from this Stage 1 Road Safety Audit:

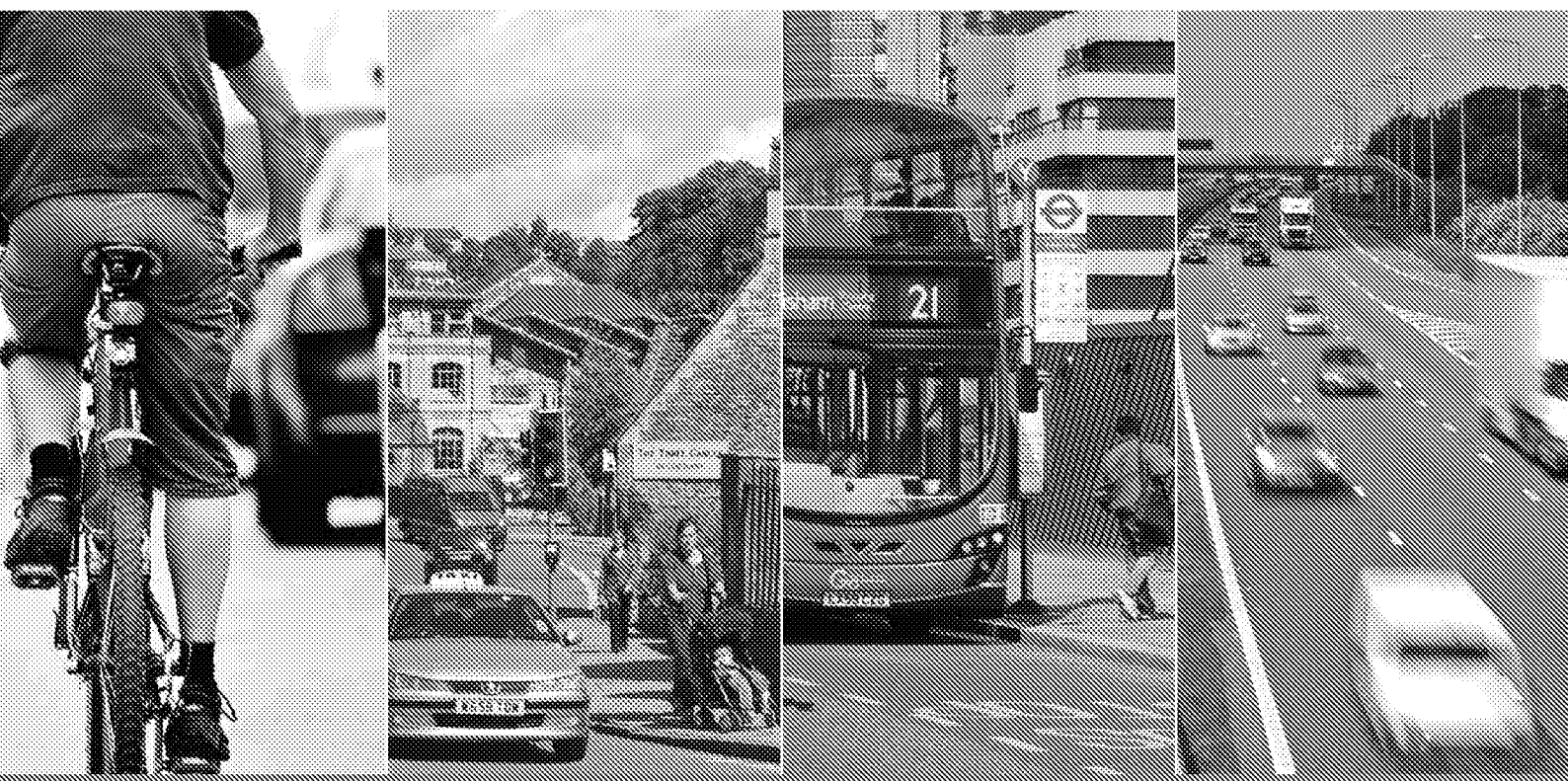


Appendix E

Designers Response to RSA1

Designers Response to RSA1

The Laurels, Dappers Lane, Angmering, West Sussex



Client: ECE Architects

Ref: 7226/2.3

Date: May 2018

Index

1	Introduction	2
2	Designers response to the RSA1	3
3	Conclusion	4

Issue	Issue date	Compiled	Checked	Authorised
DRAFT	4 th May 2017	RS	RW	LNS

Compiled by: Rachel Stevenson
Checked by: Richard Wells BSc, MCIHT
Authorised by: Lawrence Stringer CEng, MCIHT, MRTPI

1 Introduction

- 1.1 EC Road Safety Limited has been commissioned by GTA Civils Ltd to undertake a Stage 1 Road Safety Audit on the proposed site access onto Dappers Lane, Angmering. The development site is Greenfield land to the rear of an existing residential dwelling. There are residential properties and local business occupying the land to the north and south of the site. There are many residential properties along the western side of Dappers Lane. There is an existing site access onto Dappers Lane (gated) that measures approximately 4 metres in width. This existing access would be amended to serve the proposed scheme. The existing dwelling on the site would be retained as part of the proposal.
- 1.2 The existing access to be amended adjoins Dappers Lane, which is a single carriageway road with a width of around 5 metres, subject to the 30mph speed limit. However, a change of speed limit is located further along Dappers Lane to the north to 60mph. The road itself is rural in its nature with residential properties located along the route. No Street lighting is present in close proximity to the site and limited footways exist along Dappers Lane with large grass verges intersecting the property boundaries.

2 Designers response to the RSA1

- 2.1 One point was raised through the RSA1 process. This is detailed in **Table 2.1** below, together with the recommendation and Designer's Response.

Table 2.1 -- RSA1 Problems, Recommendations & Designer's Response

Problem	Location	Description	Recommendation	Designer's Response	Comments
3.3.1	Visibility and sightlines from proposed access.	Restricted visibility and sightlines could result in side swipe collisions.	Provide visibility splays to enable emerging drivers using the access point adequate visibility to see oncoming traffic in sufficient time to make their manoeuvre safely. This may be achieved by reducing and cutting back the trees and planting on the site boundary.	In accordance with Manual for Streets, adequate visibility splays of 2.4m x 43m will be provided at the access point. The existing hedges and undergrowth in this area will also be cut back as necessary to ensure these visibility splays are achievable.	

3 Conclusion

- 3.1 There was 1 problem raised through the RSA1 process which is of fairly minor nature and is straightforward to address. Therefore, the RSA1 has not raised any fundamental problems cannot be resolved.

- End of Report -

Appendix F

TRICS Outputs

Calculation Reference: AUDIT-349901-160707-0705

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	WK WARWICKSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 6 to 23 (units:)
Range Selected by User: 6 to 25 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 16/09/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	3 days
Thursday	2 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	8 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	5

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	8
------------------	---

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:Use Class:

C3	7 days
----	--------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	4 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	8 days
----	--------

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CA-03-A-04	DETACHED		CAMBRIDGESHIRE
	THORPE PARK ROAD			
	PETERBOROUGH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	9		
	Survey date: TUESDAY	18/10/11		Survey Type: MANUAL
2	NF-03-A-03	DETACHED HOUSES		NORFOLK
	HALING WAY			
	THETFORD			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	10		
	Survey date: WEDNESDAY	16/09/15		Survey Type: MANUAL
3	NY-03-A-08	TERRACED HOUSES		NORTH YORKSHIRE
	NICHOLAS STREET			
	YORK			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	21		
	Survey date: MONDAY	16/09/13		Survey Type: MANUAL
4	NY-03-A-11	PRIVATE HOUSING		NORTH YORKSHIRE
	HORSEFAIR			
	BOROUGHBRIDGE			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	23		
	Survey date: WEDNESDAY	18/09/13		Survey Type: MANUAL
5	SF-03-A-05	DETACHED HOUSES		SUFFOLK
	VALE LANE			
	BURY ST EDMUNDS			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	18		
	Survey date: WEDNESDAY	09/09/15		Survey Type: MANUAL
6	SH-03-A-06	BUNGALOWS		SHROPSHIRE
	ELLESMERE ROAD			
	SHREWSBURY			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	16		
	Survey date: THURSDAY	22/05/14		Survey Type: MANUAL
7	WK-03-A-01	TERRACED/ SEMI / DET.		WARWICKSHIRE
	ARLINGTON AVENUE			
	LEAMINGTON SPA			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	6		
	Survey date: FRIDAY	21/10/11		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 WK-03-A-02 BUNGALOWS WARWICKSHIRE
 NARBERTH WAY
 POTTERS GREEN
 COVENTRY
 Edge of Town
 Residential Zone
 Total Number of dwellings: 17
 Survey date: THURSDAY 17/10/13 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
NY-03-A-07	Anomalous Result
SF-03-A-04	Anomalous Result
SH-03-A-03	Anomalous Result
ST-03-A-05	Anomalous Result

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	15	0.050	8	15	0.200	8	15	0.250
08:00 - 09:00	8	15	0.100	8	15	0.292	8	15	0.392
09:00 - 10:00	8	15	0.117	8	15	0.167	8	15	0.284
10:00 - 11:00	8	15	0.183	8	15	0.125	8	15	0.308
11:00 - 12:00	8	15	0.075	8	15	0.108	8	15	0.183
12:00 - 13:00	8	15	0.133	8	15	0.108	8	15	0.241
13:00 - 14:00	8	15	0.117	8	15	0.092	8	15	0.209
14:00 - 15:00	8	15	0.133	8	15	0.175	8	15	0.308
15:00 - 16:00	8	15	0.242	8	15	0.292	8	15	0.534
16:00 - 17:00	8	15	0.183	8	15	0.100	8	15	0.283
17:00 - 18:00	8	15	0.308	8	15	0.083	8	15	0.391
18:00 - 19:00	8	15	0.217	8	15	0.133	8	15	0.350
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.858			1.875			3.733

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP \times FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 6 - 23 (units:)
 Survey date date range: 01/01/08 - 16/09/15
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 4

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TAXIS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	15	0.000	8	15	0.000	8	15	0.000
08:00 - 09:00	8	15	0.000	8	15	0.000	8	15	0.000
09:00 - 10:00	8	15	0.000	8	15	0.000	8	15	0.000
10:00 - 11:00	8	15	0.008	8	15	0.008	8	15	0.016
11:00 - 12:00	8	15	0.000	8	15	0.000	8	15	0.000
12:00 - 13:00	8	15	0.000	8	15	0.000	8	15	0.000
13:00 - 14:00	8	15	0.000	8	15	0.000	8	15	0.000
14:00 - 15:00	8	15	0.000	8	15	0.000	8	15	0.000
15:00 - 16:00	8	15	0.000	8	15	0.000	8	15	0.000
16:00 - 17:00	8	15	0.000	8	15	0.000	8	15	0.000
17:00 - 18:00	8	15	0.000	8	15	0.000	8	15	0.000
18:00 - 19:00	8	15	0.000	8	15	0.000	8	15	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.008			0.016

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP * FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 6 - 23 (units:)
 Survey date date range: 01/01/08 - 16/09/15
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 4

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

OGVS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	15	0.000	8	15	0.000	8	15	0.000
08:00 - 09:00	8	15	0.000	8	15	0.000	8	15	0.000
09:00 - 10:00	8	15	0.000	8	15	0.000	8	15	0.000
10:00 - 11:00	8	15	0.017	8	15	0.000	8	15	0.017
11:00 - 12:00	8	15	0.000	8	15	0.008	8	15	0.008
12:00 - 13:00	8	15	0.000	8	15	0.000	8	15	0.000
13:00 - 14:00	8	15	0.000	8	15	0.000	8	15	0.000
14:00 - 15:00	8	15	0.000	8	15	0.000	8	15	0.000
15:00 - 16:00	8	15	0.000	8	15	0.000	8	15	0.000
16:00 - 17:00	8	15	0.000	8	15	0.000	8	15	0.000
17:00 - 18:00	8	15	0.008	8	15	0.008	8	15	0.016
18:00 - 19:00	8	15	0.000	8	15	0.000	8	15	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.025			0.016			0.041

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP * FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 6 - 23 (units:)
 Survey date date range: 01/01/08 - 16/09/15
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 4

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

PSVS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	15	0.000	8	15	0.000	8	15	0.000
08:00 - 09:00	8	15	0.000	8	15	0.000	8	15	0.000
09:00 - 10:00	8	15	0.000	8	15	0.000	8	15	0.000
10:00 - 11:00	8	15	0.000	8	15	0.000	8	15	0.000
11:00 - 12:00	8	15	0.000	8	15	0.000	8	15	0.000
12:00 - 13:00	8	15	0.000	8	15	0.000	8	15	0.000
13:00 - 14:00	8	15	0.000	8	15	0.000	8	15	0.000
14:00 - 15:00	8	15	0.000	8	15	0.000	8	15	0.000
15:00 - 16:00	8	15	0.000	8	15	0.000	8	15	0.000
16:00 - 17:00	8	15	0.000	8	15	0.000	8	15	0.000
17:00 - 18:00	8	15	0.000	8	15	0.000	8	15	0.000
18:00 - 19:00	8	15	0.000	8	15	0.000	8	15	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

Trip rate parameter range selected: 6 - 23 (units:)
 Survey date date range: 01/01/08 - 16/09/15
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 4

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

CYCLISTS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	15	0.000	8	15	0.083	8	15	0.083
08:00 - 09:00	8	15	0.000	8	15	0.050	8	15	0.050
09:00 - 10:00	8	15	0.000	8	15	0.017	8	15	0.017
10:00 - 11:00	8	15	0.000	8	15	0.050	8	15	0.050
11:00 - 12:00	8	15	0.000	8	15	0.025	8	15	0.025
12:00 - 13:00	8	15	0.033	8	15	0.008	8	15	0.041
13:00 - 14:00	8	15	0.025	8	15	0.000	8	15	0.025
14:00 - 15:00	8	15	0.008	8	15	0.008	8	15	0.016
15:00 - 16:00	8	15	0.067	8	15	0.000	8	15	0.067
16:00 - 17:00	8	15	0.067	8	15	0.008	8	15	0.075
17:00 - 18:00	8	15	0.033	8	15	0.017	8	15	0.050
18:00 - 19:00	8	15	0.017	8	15	0.000	8	15	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.250			0.266			0.516

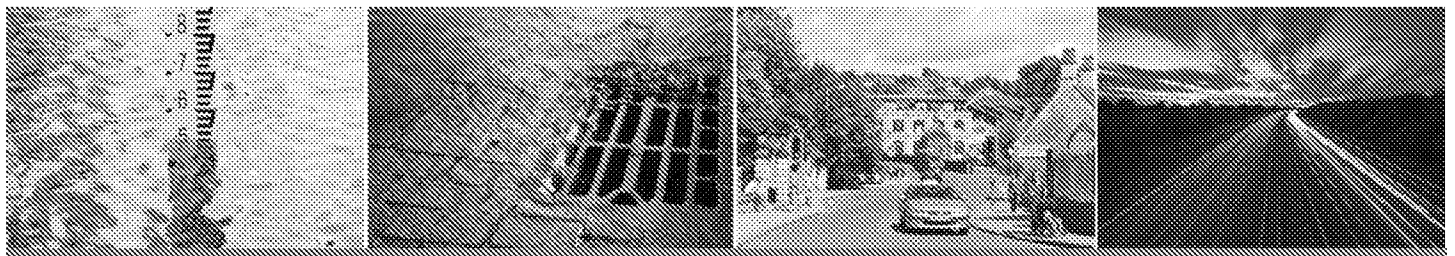
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

Trip rate parameter range selected: 6 - 23 (units:)
 Survey date date range: 01/01/08 - 16/09/15
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Drainage - Flood Risk - Highways - Transport

